

What is Claimed:

1. An amorphous silica gel composition comprising particulate having:
  - (a) a median particle size in the range of about 5 to 12;
  - (b) bronze screen Einlehner hardness of about 0.1 to 3;
  - (c) total volatiles content of about 20 to about 40% by weight based on the weight of silica; and
  - (d) a pH of about 3.0 to 6.0.
2. The composition of claim 1 wherein (a) is in the range of about 7 to 10.
3. The composition of claim 1 wherein (b) is in the range of about 0.5 to about 2.0.
4. The composition of claim 1 wherein (c) is about 25 to 35%.
5. The composition of claim 1 wherein the particular consists essentially of silica gel.
6. A dentifrice composition comprising 0.1 to 99% orally-acceptable carrier and amorphous silica gel abrasive,
  - (1) the abrasive having a:
    - (a) a median particle size in the range of about 5 to 12 microns;
    - (b) bronze screen Einlehner hardness of about 0.1 to 3;
    - (c) total volatiles content of 20 to about 40% by weight based on the weight of silica; and
    - (d) a pH of about 3.0 to 6.0; and
  - (2) the dentifrice composition having a Pellicle Cleaning Ratio of at least 80.
7. The dentifrice composition of claim 6 wherein the abrasive (1) consists essentially of silica gel.

8. The dentifrice composition of claim 6 wherein (c) is in the range of about 25 to about 35.
9. The dentifrice composition of claim 6 wherein (a) is in the range of 7 to about 10 microns.
10. The dentifrice composition of claim 6 further comprising a second silica abrasive.
11. The dentifrice composition of claim 6 wherein the dentifrice has a PCR of at least 100.
12. The dentifrice composition of claim 6 wherein the silica abrasive comprises about 10 to about 25% of the composition's total weight.
13. A process for making an abrasive silica composition comprising:
  - (a) preparing a first silica gel and washing it at a temperature of no more than 130°F for at least five hours;
  - (b) preparing a second silica gel and washing it at a temperature of at least 110°F for at least eight hours;
  - (c) milling and drying the gels of (a) and (b); and
  - (d) optionally adding alkaline compound as necessary to the gels of (a) and (b) in order to obtain a pH of in the range of 3 to 6 after the gels of (a) and (b) have been combined, wherein the pH is measured in an aqueous solution containing 5% by weight gel.
14. The process of claim 13 wherein step (c) comprises milling and drying gels of (a) and (b) separately before the gels of (a) and (b) are combined.
15. The process of claim 14 wherein the gel of (a) is milled to a median particle size in the range of 6 - 10 microns and the gel of (b) is milled to a median particle size of in the range of 8 - 12 microns.

16. The process of claim 13 wherein the gels of (a) and (b) are dried in (c) to contain a volatiles content in the range of 20-40% by weight based on the gel.
17. The process of claim 13 wherein the alkaline compound is sodium bicarbonate.